

5 dispersing the blowing agent in the melt with shearing of the melt thereby
6 creating a mixture;
7 retaining the mixture within a predetermined pressure range for a predetermined
8 retention time;
9 subjecting the mixture to less shearing, with respect to the shearing during the
10 dispersing step, during the predetermined retention time;
11 cooling the mixture to a temperature that is above the solidification temperature
12 of the melt;
13 granulating the cooled mixture; and
14 acting on the mixture with static mixer elements; and
15 wherein the [method] dispensing of the blowing agent and the retaining of the
16 mixture is carried out in a single apparatus in which the mixture is acted upon continuously by
17 means of the static mixing elements as the mixture moves through the apparatus for avoiding
18 segregation.

REMARKS

Claims 16-26, 28 and 29 are pending.

Claims 16-26 and 28-29 stand rejected under 35 USC §112, First Paragraph, as containing subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor(s) at the time the application was filed, had possession of the claimed invention. The Examiner referred to the limitations that "which does not use extruders" and "wherein the method is carried out in a single apparatus in which the mixture is acted upon continuously by means of the static mixing elements." This rejection is respectfully traversed and reconsideration is respectfully requested.

With regard to the Examiner's concerns pertaining to the limitation "which does not use extruders" it is respectfully submitted that the Examiner's reliance on the disclosure of "a heatable extruder ... uses a melting device" is misplaced. It is respectfully submitted that it is clear that the heatable extruder is disclosed as being used as a melting device and this is not subject matter of the claimed method. It is respectfully submitted that the claimed method involves a first step wherein plastic is already molten. Hence, the subject matter recited in

claim 16 is being carried out without the use of extruders and is fully supported by the specification in such a way as to enable one skilled in the art.

With regard to the Examiner's concerns pertaining to the limitation "wherein the method is carried out in a single apparatus in which the mixture is acted upon continuously by means of the static mixing elements" Applicant has amended claim 16 to make it clear that it is not the method that is carried out in a single apparatus, but that it is the impregnation, which comprises only the first two steps of the method, specifically, the dispersing step and the second step of retaining the mixture within... a predetermined retention time.

Accordingly, it is respectfully submitted that the specification does reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Accordingly, it is respectfully requested that the rejection be withdrawn.

Claims 16-26 and 28-29 stand rejected under 35 USC §112, Second Paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicant regards as the invention. The Examiner states that the limitation of "wherein the method is carried out in a single apparatus in which the mixture is acted upon continuously by means of static mixing elements" is unclear as to whether the method is carried out in a single apparatus or a single type of apparatus. It is respectfully submitted that the phrase is clear on its face. The impregnation, and hence the first two steps of the method, is carried out in a single apparatus. Accordingly, it is respectfully requested that the rejection be withdrawn. The Examiner responded to the previous arguments made by stating that the arguments are not supported by the specification. It is respectfully submitted that the arguments are indeed supported by the specification. Furthermore, it is respectfully submitted that the first static mixer and the second static mixer are contained within a single apparatus, hence the final limitation of claim 16.

With regard to the arguments pertaining to the lack of use of extruders, it is respectfully submitted that none of the references disclose a method that does not utilize an extruder. As pointed out by the Applicant on Page 2, lines 12-26, large quantities of EPS or other comparable granulates cannot be economically produced by extruders because a plurality of extruders used in parallel would have to be used. In contrast, the present invention provides

a method in which the impregnation of plastics melt may be carried out in a single apparatus thus providing an economical advantage. The present invention teaches that large quantities of expandable plastics granulate may be produced in an apparatus if provisions against segregation of the melt and blowing agent are made. Thus, the present invention utilizes static mixing elements over the course of the process in order to avoid segregation.

Accordingly, it is respectfully submitted that claim 16 is allowable. Furthermore, claims 17-26 and 28-29 depend, either directly or indirectly, on claim 16, and therefore, they are allowable for least the reasons claim 16 is allowable.

CONCLUSION

In view of the foregoing, Applicant believes all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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